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NOVEMBER 10, 1924

Issued Weekly

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Fighting the boll weevil—Cotton dusting plane being loaded with calcium arsenate

VOLUME
XVII

SPECIAL FEATURES

THE INDEPENDENT AIR FORCE
THE NAVAL AIRCRAFT INVESTIGATION
FLIGHT TESTING OF NEW LIGHT PLANES
THE SHENANDOAH'S GREAT FLIGHT

NUMBER
19

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under Act of March 3, 1879.



COMMENTING on the Around-the-World flight, a splendid achievement, which will stand exhaustingly to the credit of the American aviator, Glenn H. Curtiss, builder of airplanes, pointed out that this flight heralds the establishment of trans-Atlantic service by airplane.

The success which has attended this daring flight has incited more courage in people than any other achievement of its kind and has greatly advanced the cause of commercial aviation, on which, at present, capital is afraid to take a chance.

When asked how long it would take before commercial planes of large size and carrying freight and passengers would be crossing the Atlantic Ocean, he replied that it would be BEFORE 1934.

Don't doubt this prediction. Remember that the first flight was in 1903. That the greatest flight made, up to 1906 was by the Wright Brothers, one

of whom remained in the air thirty minutes, flying 24½ miles. That it was not until 1910 that the great London Daily Mail was called upon to pay the \$10,000 it had offered as a prize for a flight from London to Manchester (a distance less than 200 miles) within twenty-four hours.

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find interesting. The book tells of aircraft engines, their lubrication, fuel and oil consumption and power characteristics, also the landing, clearing and speeds of various types of planes. It also shows air routes and on a large map, it locates every government, commercial and emergency landing field in the middle west. A copy will be sent free upon request, as long as the supply lasts.

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NOVEMBER 10, 1924

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VOL. XVII

NOVEMBER 10, 1924

No. 19

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THE Secretary of Labor, James S. Davis, in a recent article on the Peace Policy of the Coolidge Administration made a statement which for the first time gives from an authoritative source the cost of the government's aeronautical activities.

Secretary Davis writes as follows: "While our present expenditures in all parts of the air service amount to some \$10,000,000 each year, because the branch of the service is still in what is an experimental stage, a considerable amount of money is being expended. It is evident that it is in the field that we may expect the largest development."

After much searching and comparing Aviation has been able to find about \$80,000,000 that is being spent on government air activities. It is therefore of the greatest interest to learn that a Cabinet officer gives the cost at ten million dollars more. Probably the figures will later be presented as a new debate from those it is giving to such large proportions.

In the aeronautical statements of the Army and Navy appropriate for Michael, Quartermaster and other branches of the Army and Navy were included, the amount would be still lower. Then, the cost of the two new aircraft services, the Lexington and the Scouting, which will probably total \$6,000,000, should also be considered. Well informed persons have the opinion that the government's aeronautical expenditures since the War have been about a half a billion dollars, which is more than the entire wartime air expenditure.

The statement of the situation are so evident that only few who are a devotee to reduce government expenditures can be found to them. There should be some one person in the Executive branch of the government with the power to suppress the expenditure of this vast sum as that expenditure (and waste too) be avoided. Congress, too, should have a similar committee to consider the aeronautical problems of the government. When this suggestion comes into being—no mind, power or time—there will be a great change for the better in American aviation.

Government Airships

GENERAL PATRICK has proposed that the airship service and that it then into the Shenandoah to the North Pole. It has been generally agreed that the proposal, the plan for exploration were forgotten and would not be revived. With so much government money invested in these two airships and the opportunity for serious experimentation, the idea of this is a bit of a secret, it seems inappropriate to discuss the matter with the idea of spectacular dashes to the Pole,

the exact value of which could only be for publicity, and which, were they to fail, would cause the airship service to lose.

AVIATION, in agreement with almost all higher-than-air experts, believes that the Shenandoah should confine its experimental activities to determining its value to the fleet. If the rigid airship has value, if it can be used as a long distance scout or in its airplane carrier, or as a post the way to further development, it will have served its purpose. The problem of the airship must be as yet far from being solved, despite the success of the Shenandoah's flight to the West coast. In making the moving cost paid, the ship could render a service that would materially advance the art of airship operation. To send it to the North Pole before any practical experiment has been made would be a waste of opportunity.

The Los Angeles, on the other hand, is a commercial type airship. The Army and Navy intend to use it largely for scouting purposes. The government paid a large sum of money to get it. It cannot be used for military or naval work. If it is to be operated by the government after the training period, this should be done in the form of a subsidized commercial airship line, possibly across the Atlantic. Here is where a real test could be made. While those who know airships best claim that the Los Angeles is only half large enough for commercial success, the ship might nevertheless be used for determining the utility and serviceability of airships for commercial air transportation.

Any discussion over these two lines of action seems to be in the domain of lost opportunities. The public wants to know whether the Shenandoah and the Los Angeles are worth the money it has put in them. The North Pole Race was won and the ship's value to the government has been fully established.

Cost of Excess Weight

FIGURES as the cost of excess weight in airplanes are very difficult to secure. An ingenious method has just been furnished AVIATION. It bases its calculations on the Air Fuel cost of \$9.65 per ton mile to transport mail which corresponds to \$9.80 for carrying one pound 760 miles.

Suppose a pilot or a part could be reduced in weight, what would the saving be in cost of operations? In this particular example one instrument weighed 9.6 pounds and cost \$25. Another weighed 12 pounds and cost \$35. The extra cost would be paid for by the cost per pound mile in 1810 miles. At a speed of 120 miles an hour it would pay for itself in 15 hours, 5 minutes flying time, and it would save a saving of \$1,365 in 1900 flying hours.

Hence, at last, is something for the slide rule shops to do in their moments of leisure. The possibilities are limitless. But after all, except in occasional aircraft, what are a few dollars among friends when the government pays the bills?



The above chart has been prepared in close consultation with the Department of Economics and is expected to be completed by the end of the year. A copy of the chart is being sent to the Department of Economics and is being placed in the Department of Economics and is being placed in the Department of Economics and is being placed in the Department of Economics.

Finish Fight Looms in Battleship-Airplane Controversy

By M. H. McINTYRE

Report on the outcome of the investigation now being made by the General Board of the Navy under instructions from the Secretary and on suggestion of the President, a show-down first on the old airplane-battling controversy soon after Congress convenes in December.

Wherever the findings of the board, and it is admitted on all sides that they must be protected on the basis that the findings will be the main reliance in sea power, air authorities are laying plans for a drive on Congress to get full recognition of the increasing importance of aviation in the national defense with a separate air force as their first

Informed by President Coolidge's recent statement in which he voiced his belief in the possibility of the airplane operating the surface fighting ship, they propose to demand that an impartial tribunal hear their case and that the aerial fighting vessel be placed in a position to be developed free from the "obstructionist" in the military service.

On the other hand rural villages are gravely concerned over the recent developments, realising the popular appeal

Present Naval Air Policy Centered On Planes Operating From Fleet

In December, 1922, the General Board of the Navy promulgated a new United States naval policy predicated on the naval parity of the bastions of armament conference which gave the United States for the first time a definite naval policy, that of maintaining a navy equal to that of Great Britain and in the ratio of 5 to 3 to that of Japan.

The following is the air policy which has been officially adopted:

To complete rigid airships now under construction and to determine from their performance in service the desirability of further construction.

To build non-rigid airships for development purposes only until their usefulness shall have been proved.

To direct the principal air effort on that part of the air service that is to operate from ships of the fleet.

To direct development of basing for our craft principally toward spotting planes and toward intercept, bomb and scout planes that can operate from ships, to combine the three latter functions in one plane.

To develop a combat plan for use against

To acquire needed plans only as necessary for training and for current requirements

To develop a working prototype of long range for operations from a ship's base or from a tender.

7. operate a spotting plane from each capital ship and from each medium cruiser.

To determine by trial the practicability and desirability of operating additional planes from capital alone, we find:

To determine by trial the practicability and desirability of operating planes from distresses and submarines.

To give every possible encouragement to artists in civil life with a view to advancing the art and in providing artists available for war.

Navy to represent the service viewpoint, with possibly General Feltner and Rear Admiral Moffett as the service aviation representatives, and representatives from the Senate and House and other civilians.

Ordinarily such a compromise would be caused only with congressional approval, but it is pointed out that the President could act in this case on his own initiative, leaving the hearings under the auspices of the joint aeronautic board and using funds already appropriated for the two services.

End of Controversy Sought

Certainly such a commission could go into the nonmilitary aspects of aviation as it applies to the national defense plans and after hearing all sides of the military phase, formulate a definite national policy that would provide plans for complete development of aviation to put this country in the forefront among the great naval powers.

[illegible]

The round-the-world flight by the Army Air Service B-19, sponsored by the Navy, as it was, did not, in the opinion of the great majority of experts, warrant the expenditure of \$200,000 to \$300,000. The one outstanding feature of the mission, most of all, was that it was planned and executed in a relatively economical way. The expenditure of almost an entire ship in humanitarian work was not a precedent. While there were covering force transports and thousands of miles of flight, approximately 50,000 miles of air mileage was done by United States Naval aircraft in helping to put the flight through.

It was the mission given by the Coast Guard and the Fisheries and Marine Service having authority. By no means to be independent of surface force representation flights are developed, but the talk of the abandonment of surface fighting craft is

Navy Hides Recruitment

In the Navy there is a feeling of restraint, small-dogged and, naturally, little

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